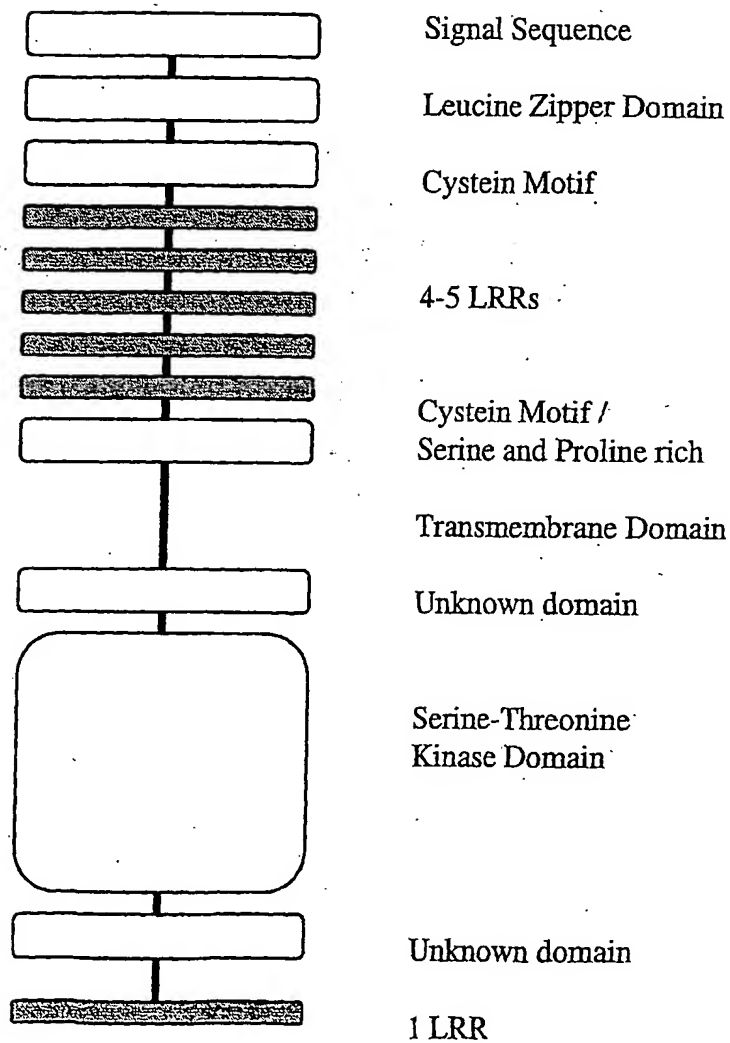


Fig. 1

Different domains of RKS proteins



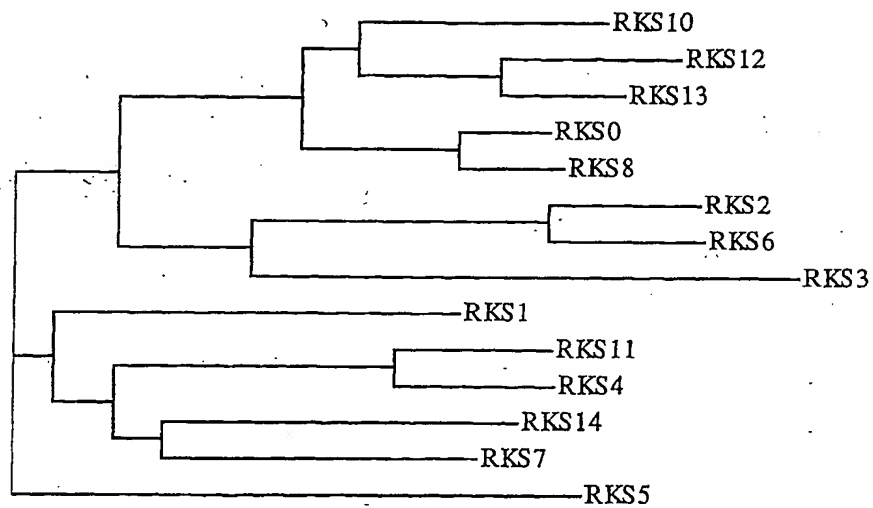
WO 2004/007712

2/36

PCT/NL2003/000524

Fig. 2

Developmental tree of the different Receptor Kinases like SERK (RKS) genes.



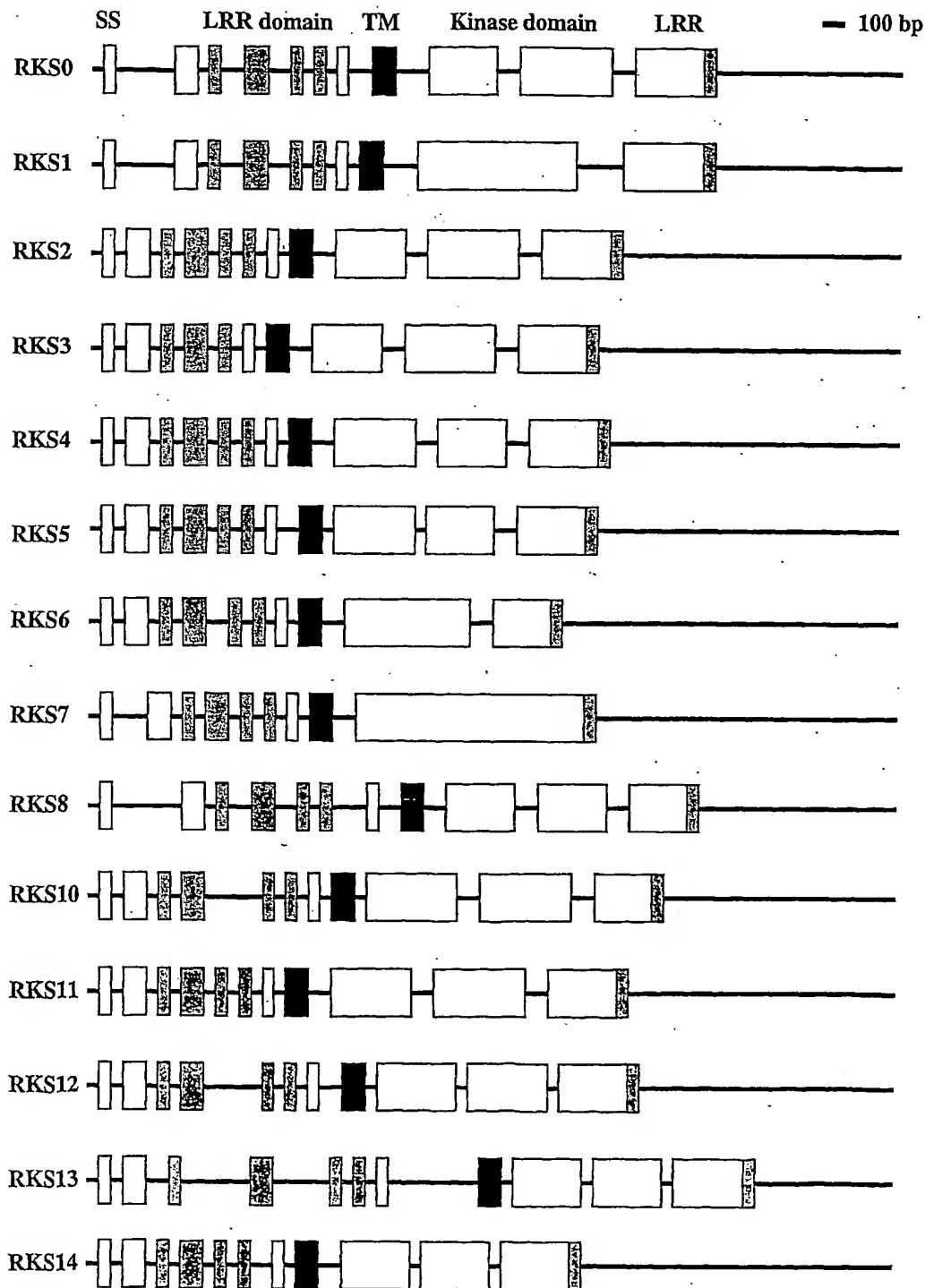
WO 2004/007712

PCT/NL2003/000524

3/36

Fig. 3

Intron-Exon structure of the RKS genes in *Arabidopsis thaliana* var. Columbia.  
SS signal sequence; LRR leucine rich repeat domain; TM transmembrane domain.



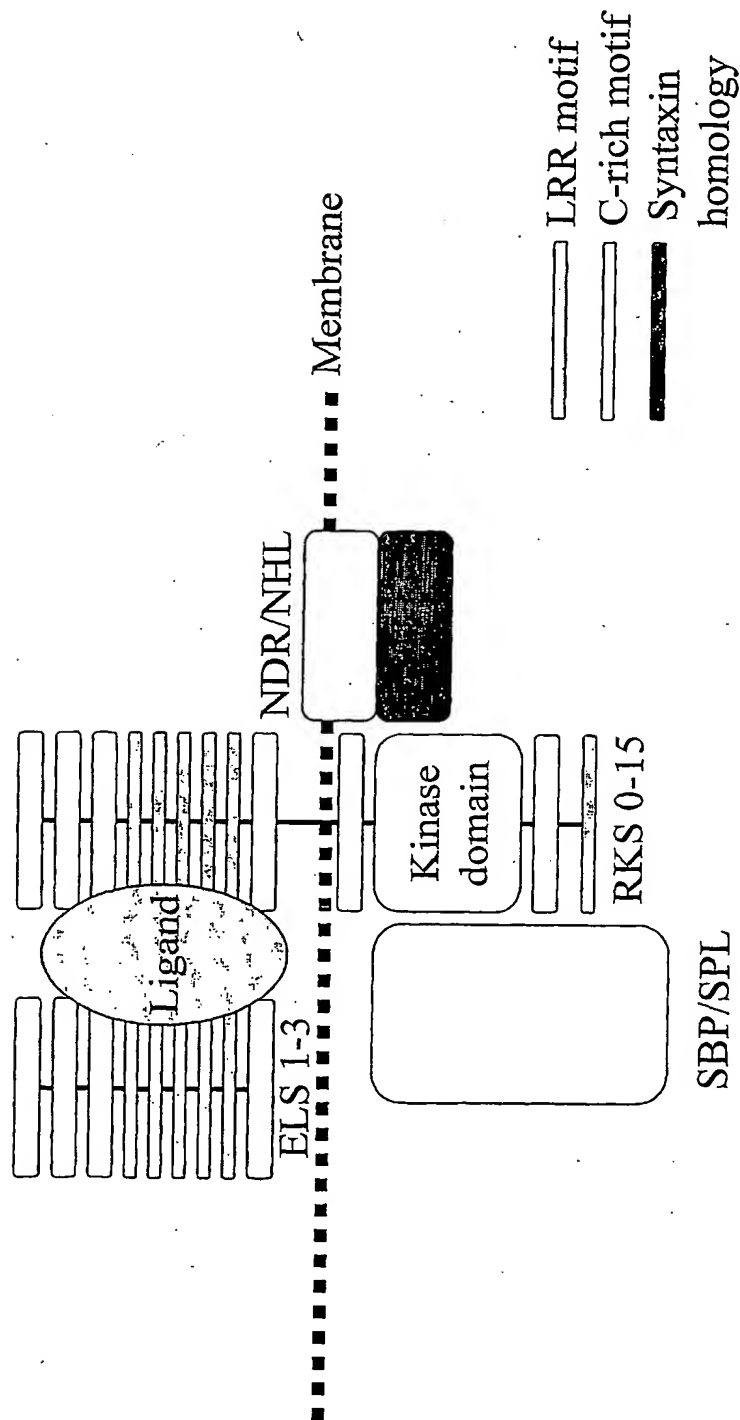
**PCT/NL2003/000524**

Fig. 4

I II III IV V

**SUBSTITUTE SHEET (RULE 26)**

# RKS-mediated signal transduction pathway in plants



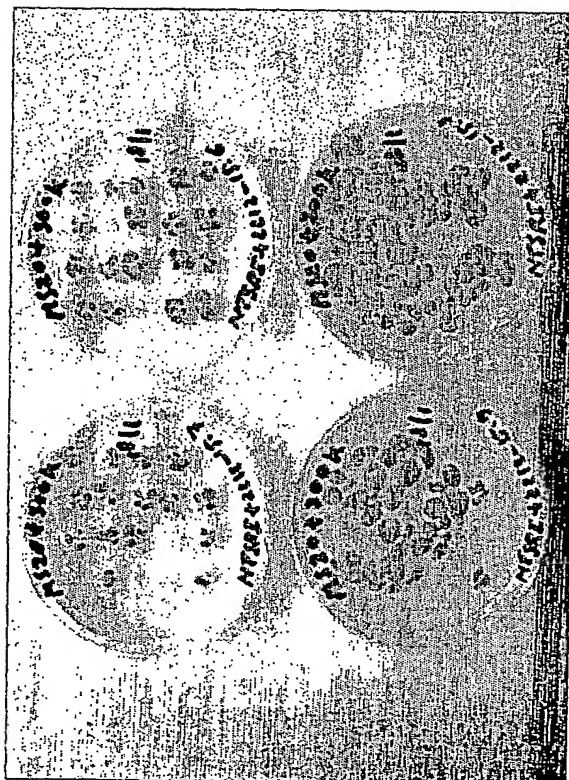
10/521518

WO 2004/007712

6/36

PCT/NL2003/000524

GT-RKS4 determines seedling size  
in *Nicotiana tabacum*.



Modifications in the  
expression profile  
of GT-RKS4 modulates  
organ size within seedlings  
of *Nicotiana tabacum*.

10/521518

WO 2004/007712

7/36

PCT/NL2003/000524

Fig. 7

GT-RKS4-7S-T2

GT-RKS4-6S-T2

GT-RKS4-3S-T2

GT-RKS4 determines organ size  
in *Nicotiana tabacum*.

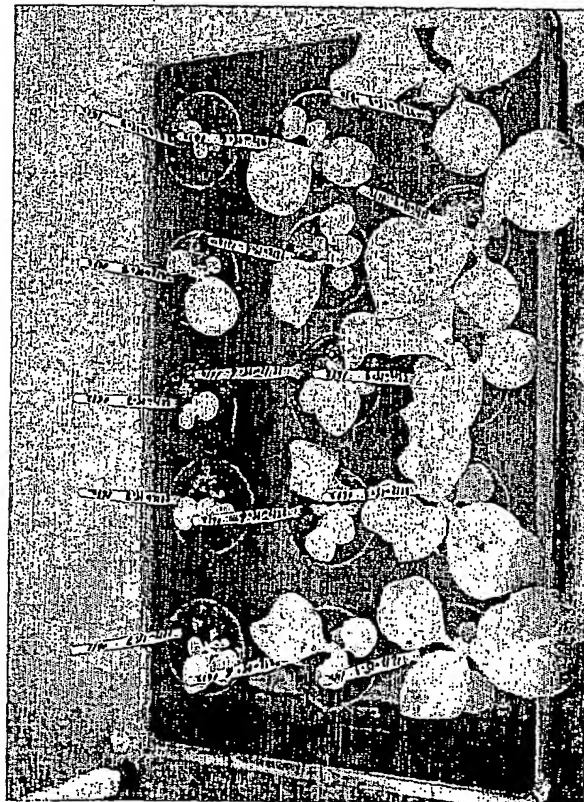
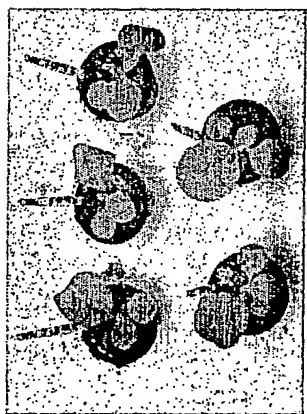


Fig. 8

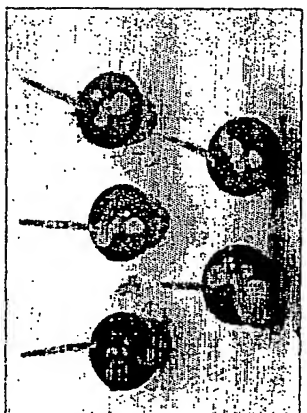
GT-RKS4 determines plant size  
in *Nicotiana tabacum*



Empty vector control



GT-RKS4-15S-6T2



GT-RKS4-15S-7T2



GT-RKS4-15S-3T2



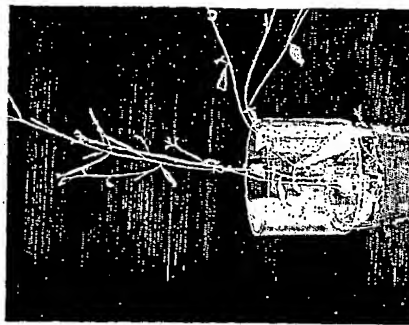
GT-RKS4-15S-9T2



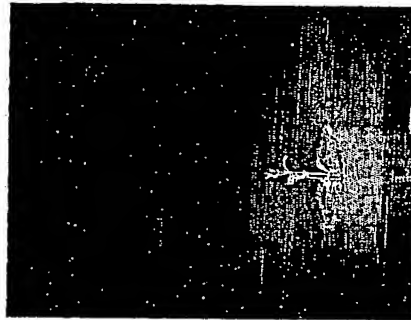
Fig. 9

Stable transformed GT-RKS4-antisense  
in *Arabidopsis thaliana*

Wildtype WS



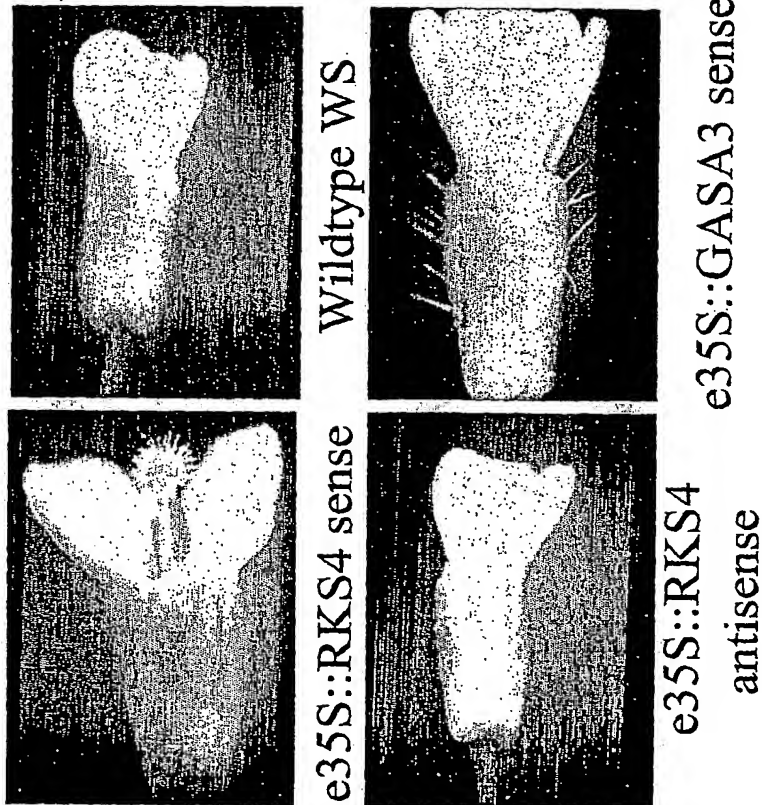
GT-RKS4-16a



Overexpression of antisense GT-RKS4-1a  
reduces plant and organ size.

Fig. 10

Ectopic expression of RKS4 and GASA3  
gene products both result in increases  
flower size in *Arabidopsis thaliana* WS



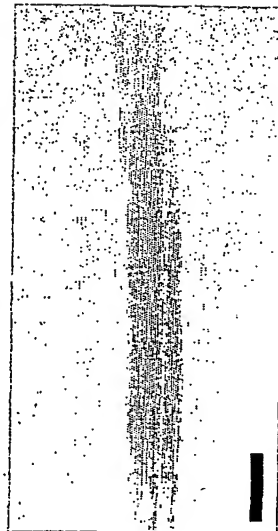
WO 2004/007712

11/36

PCT/NL2003/000524

Fig. 11

Ectopic expression of RKS4 in seedlings results  
in the formation of meristematic regions in the  
hypocotyl of *Arabidopsis thaliana* WS



pCDG

Destruction

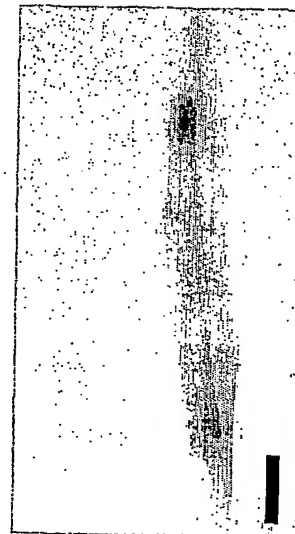
box



CycB1;1



uidA



pCDG

x

e35S::RKS4 sense

WO 2004/007712

12/36

PCT/NL2003/000524

Fig. 12

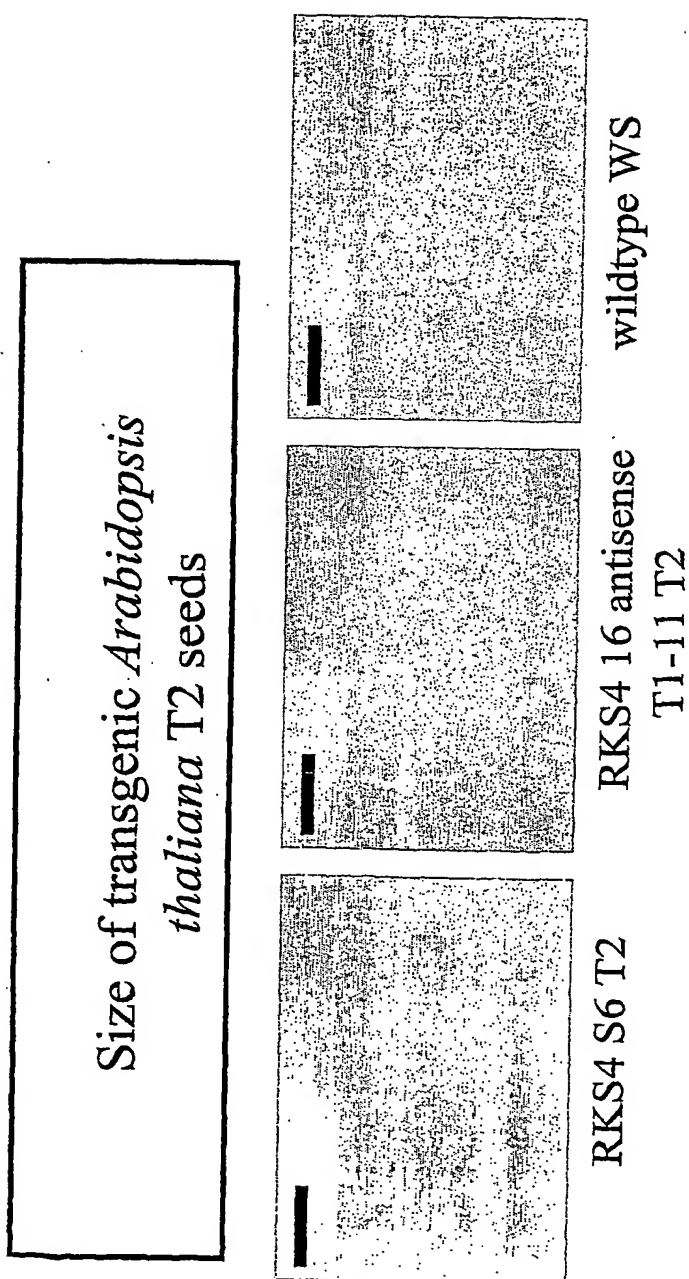


Fig. 13

RKS4 regulates cell number and cell size in *Arabidopsis thaliana*.

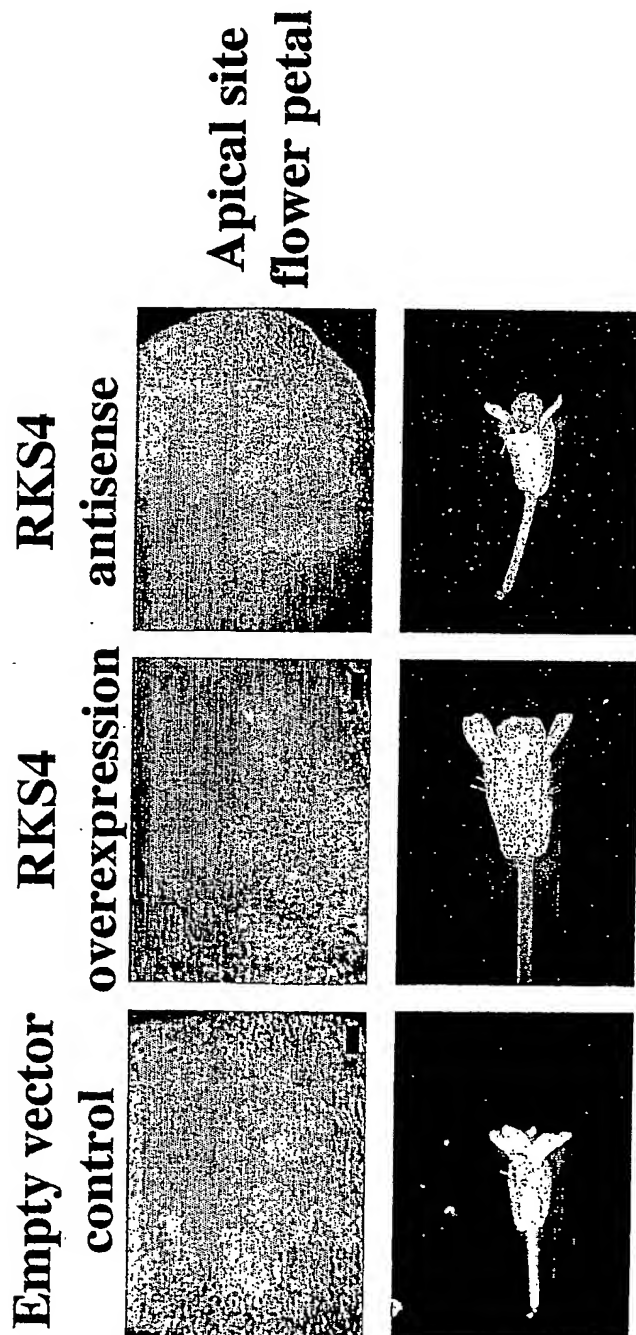
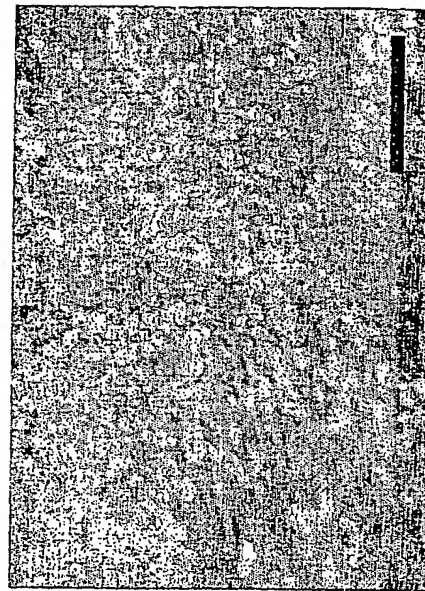


Fig. 14

RKS10S T1-10  
results in a decrease in size  
of cotyl-like apical epidermal cells



RKS10S T1-10



pGreen 4K

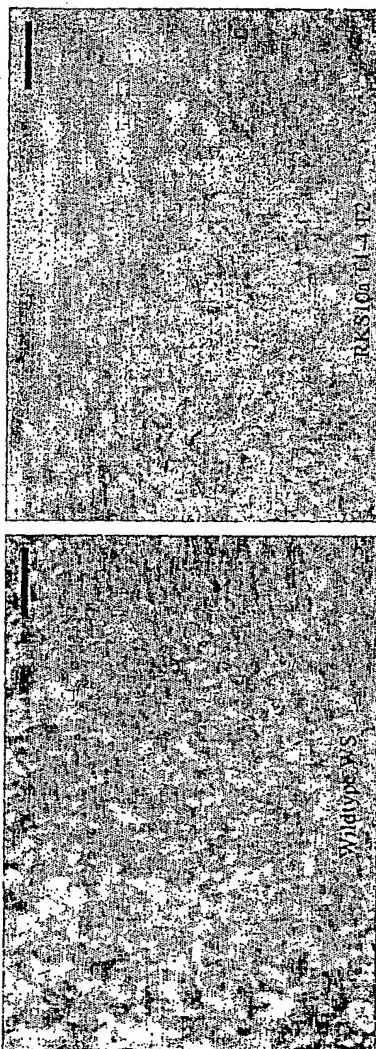
WO 2004/007712

PCT/NL2003/000524

15/36

Fig. 15

RKS10antisense T1-4  
results in an increase in size  
of the cotyl epidermal cells



10/521518

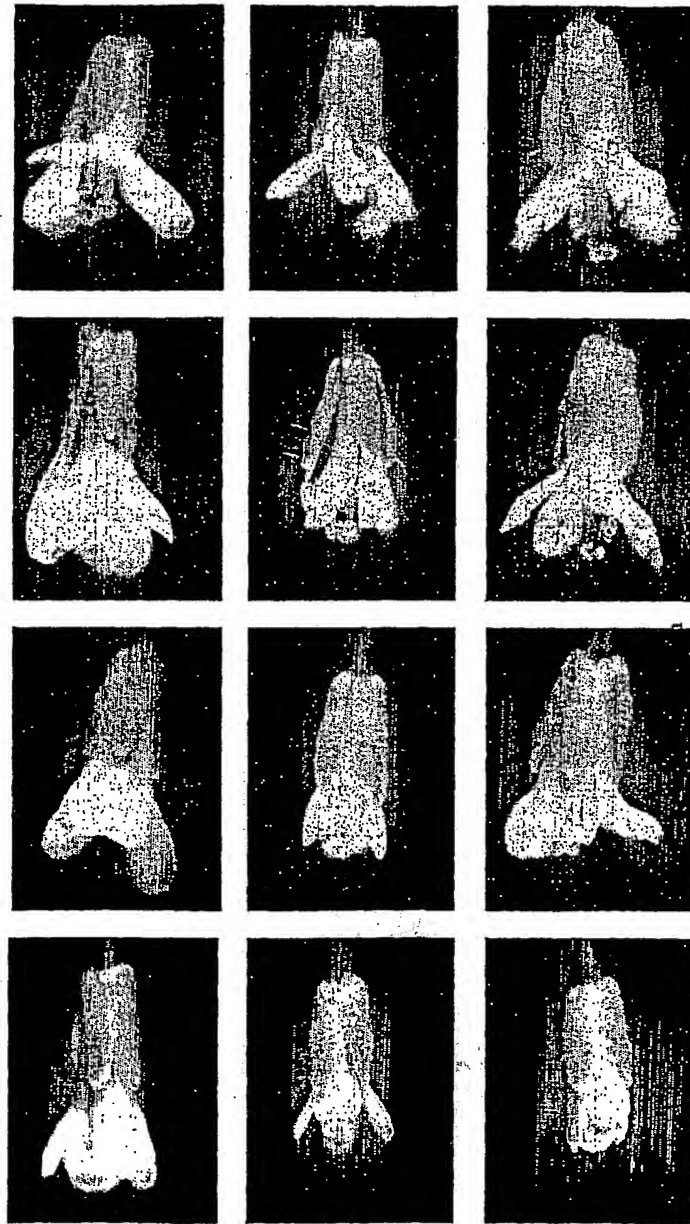
WO 2004/007712

16/36

PCT/NL2003/000524

Fig. 16

Flower development from the same  
inflorescence in transgenic  
*Arabidopsis thaliana*





WO 2004/007712

17/36

PCT/NL2003/000524

Fig. 17

Regeneration potential of  
*Arabidopsis* transgenic seedlings.

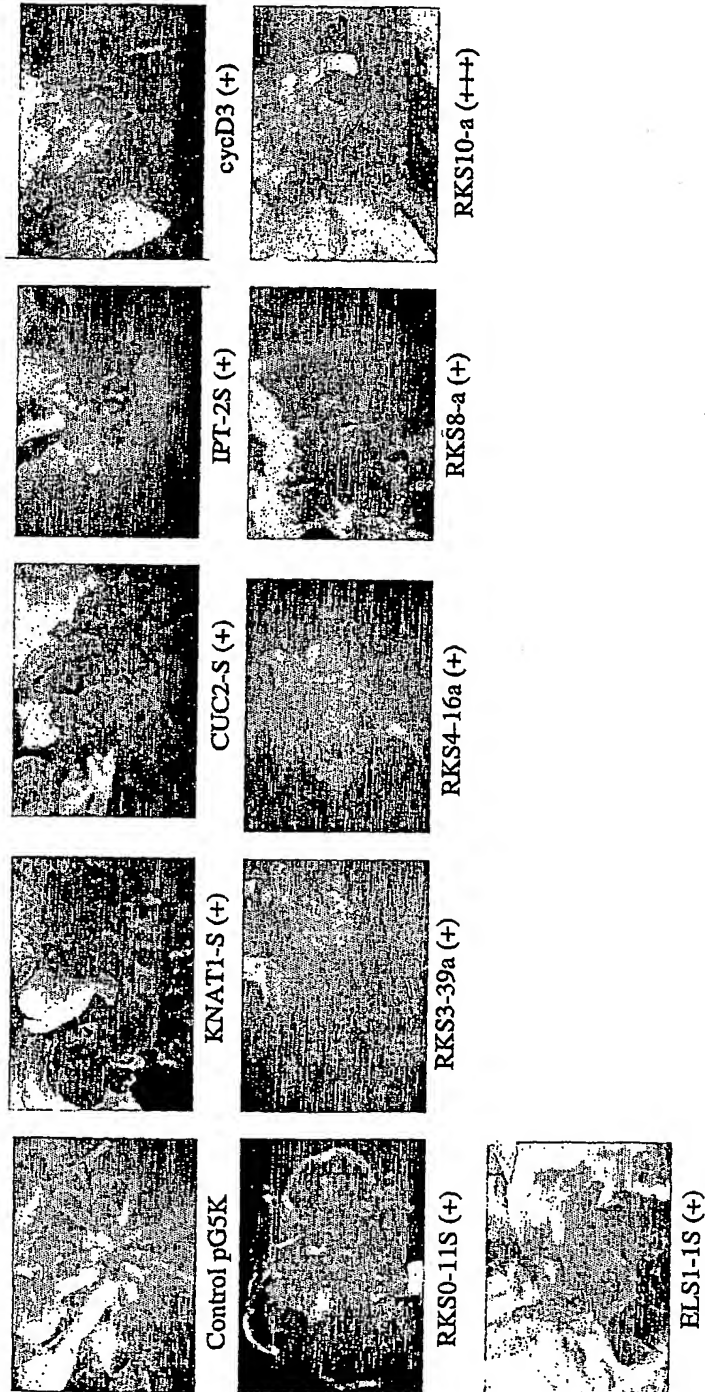
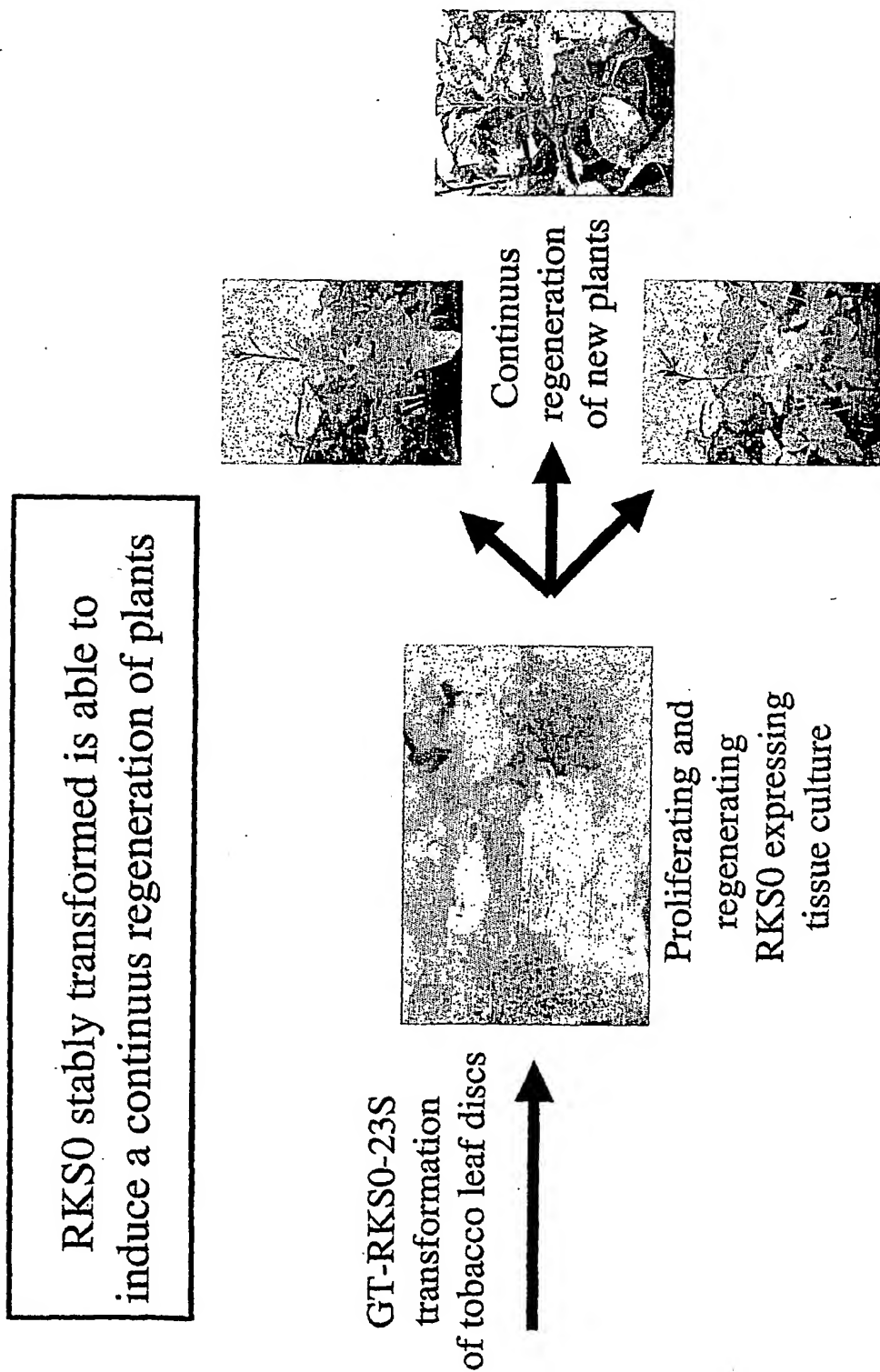


Fig. 18



WO 2004/007712

19/36

PCT/NL2003/000524

Fig. 19

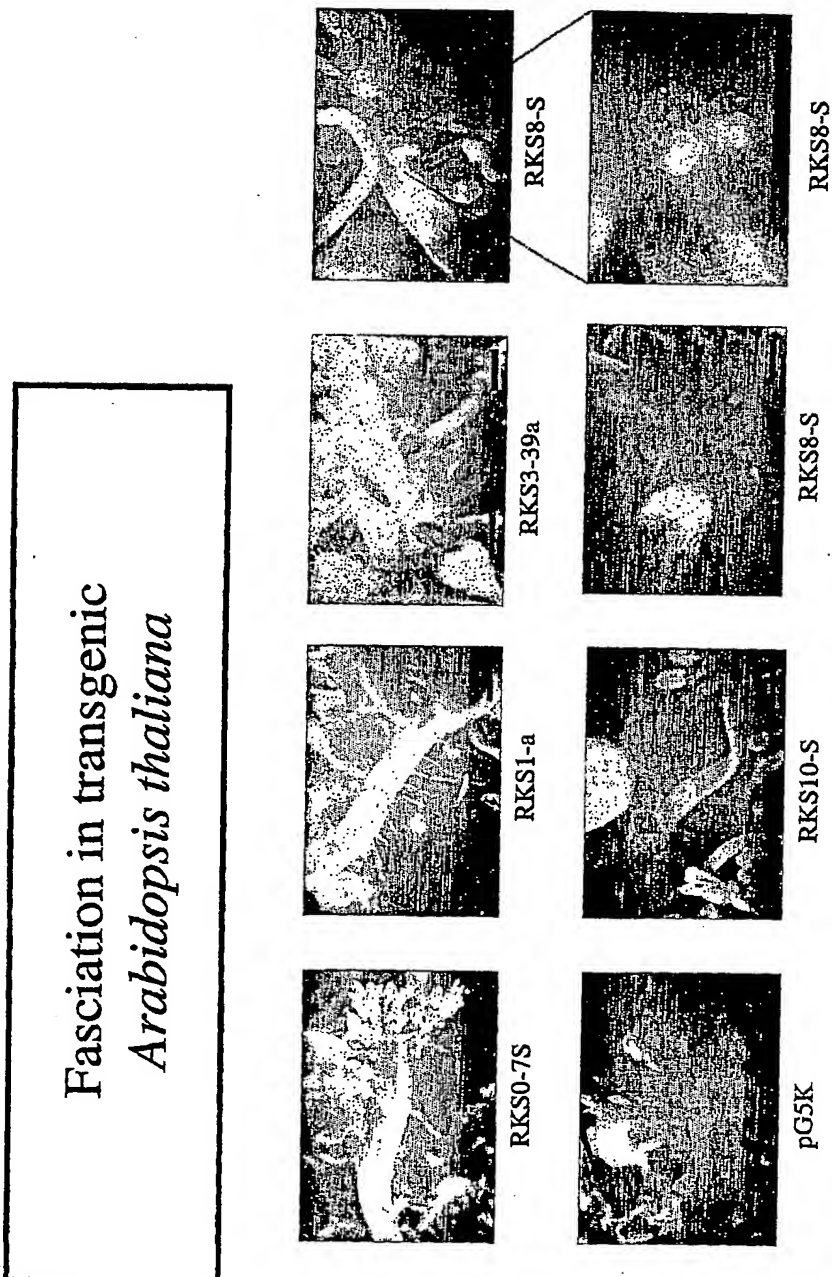


Fig. 20

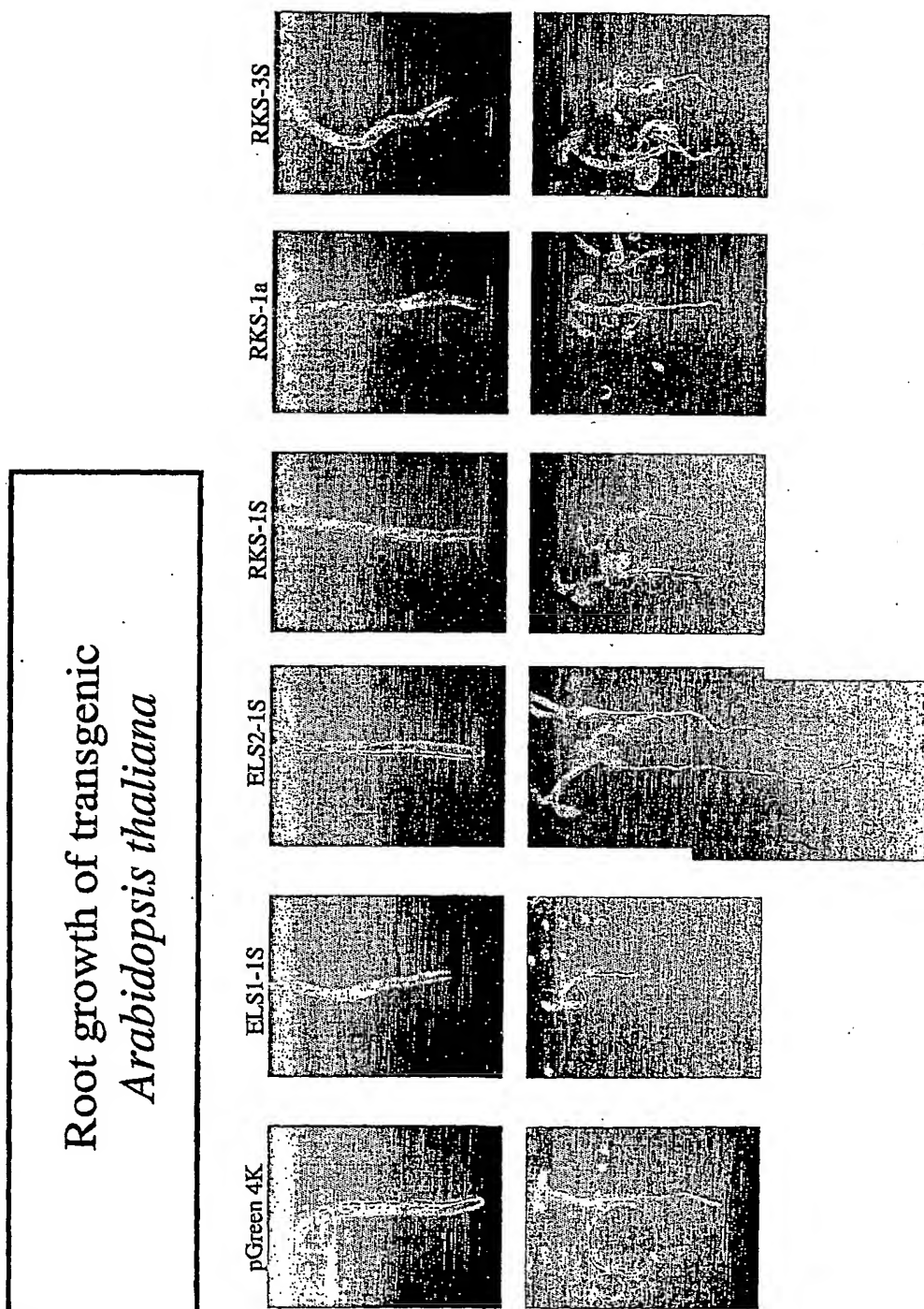


Fig. 21

Root growth of transgenic  
*Arabidopsis thaliana*

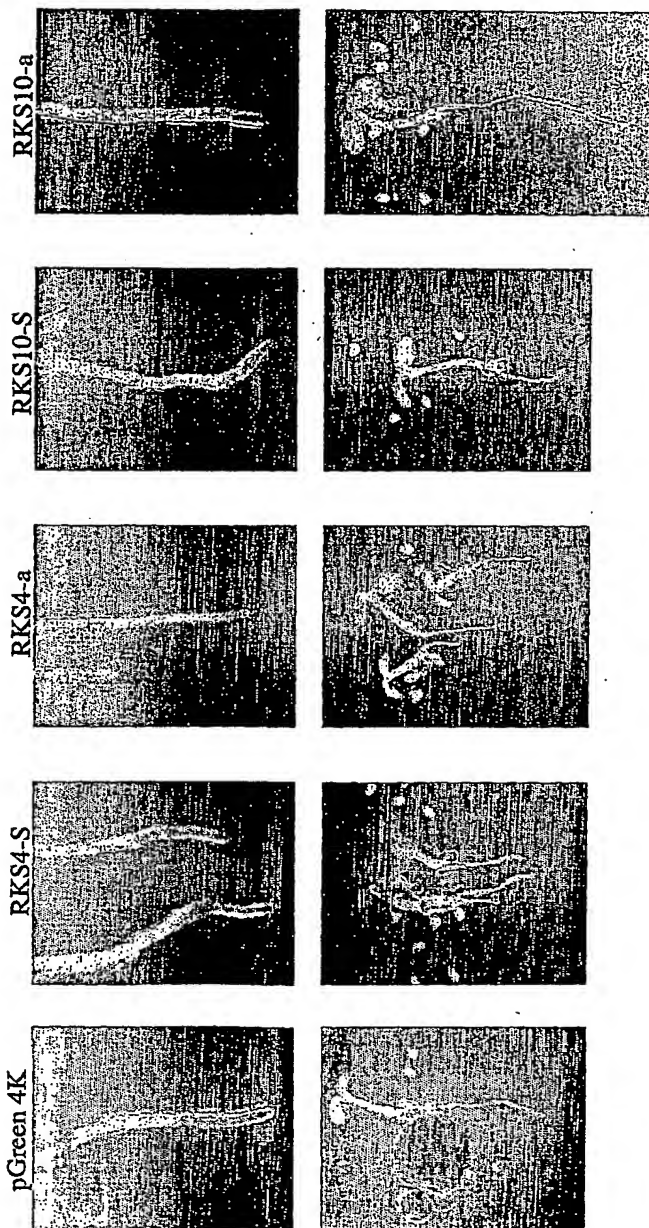


Fig. 22

Root growth of transgenic  
*Arabidopsis thaliana*

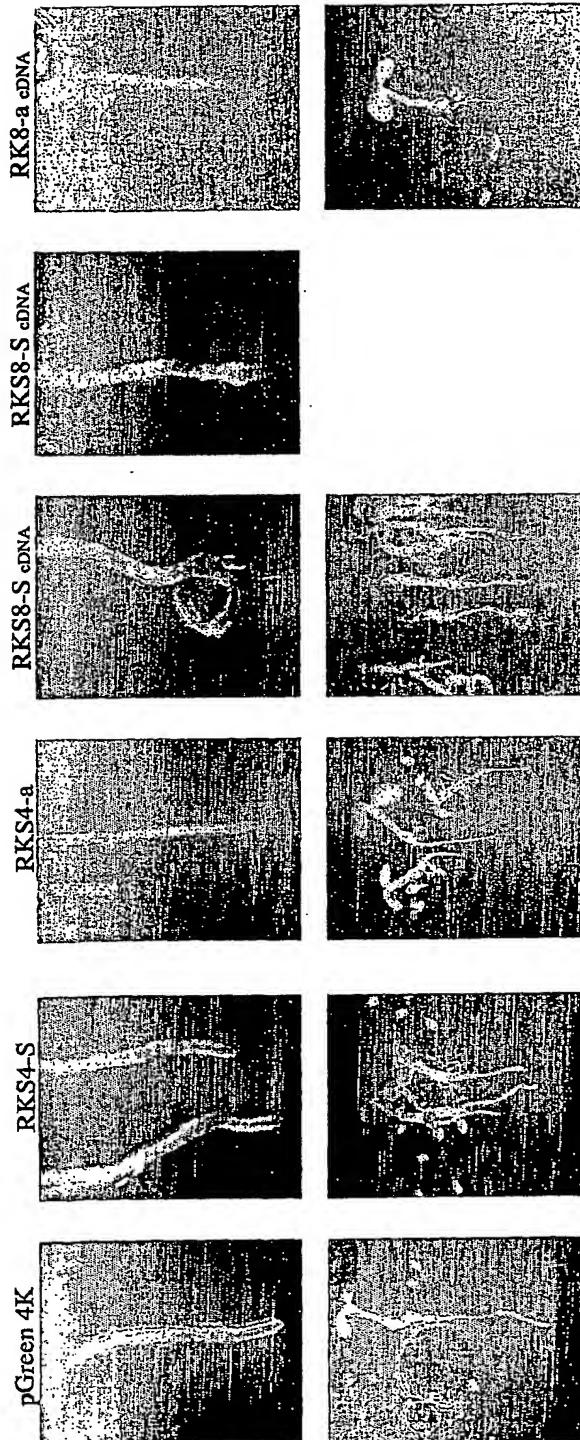
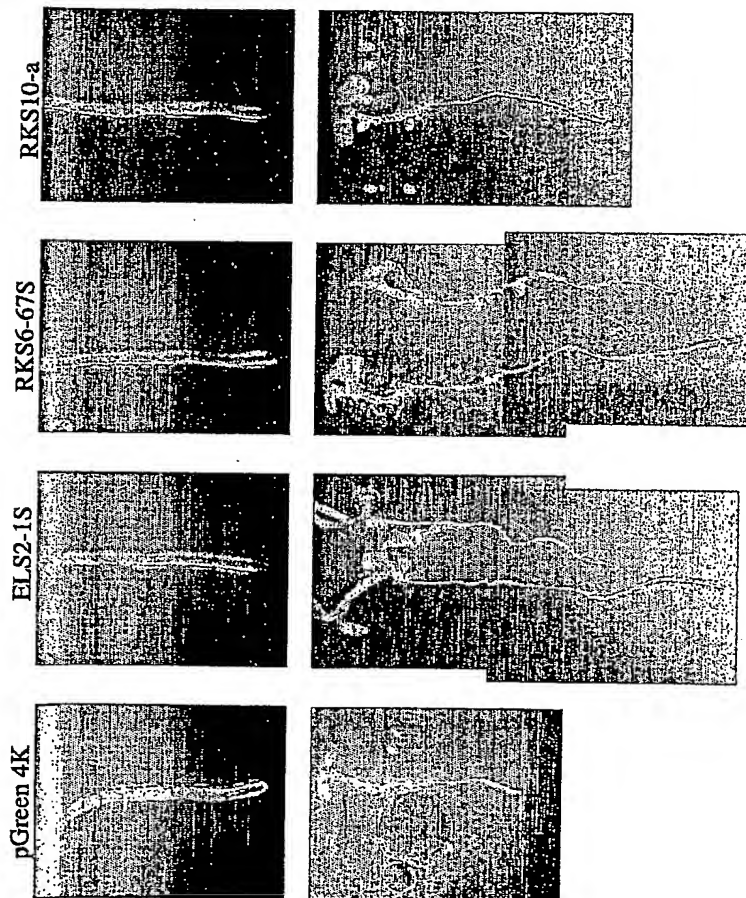


Fig. 23

Root growth of transgenic  
*Arabidopsis thaliana*





WO 2004/007712

PCT/NL2003/000524

24/36

Fig. 24

Transgenic *Arabidopsis thaliana*  
 primary root length after 14 days  
 of germination

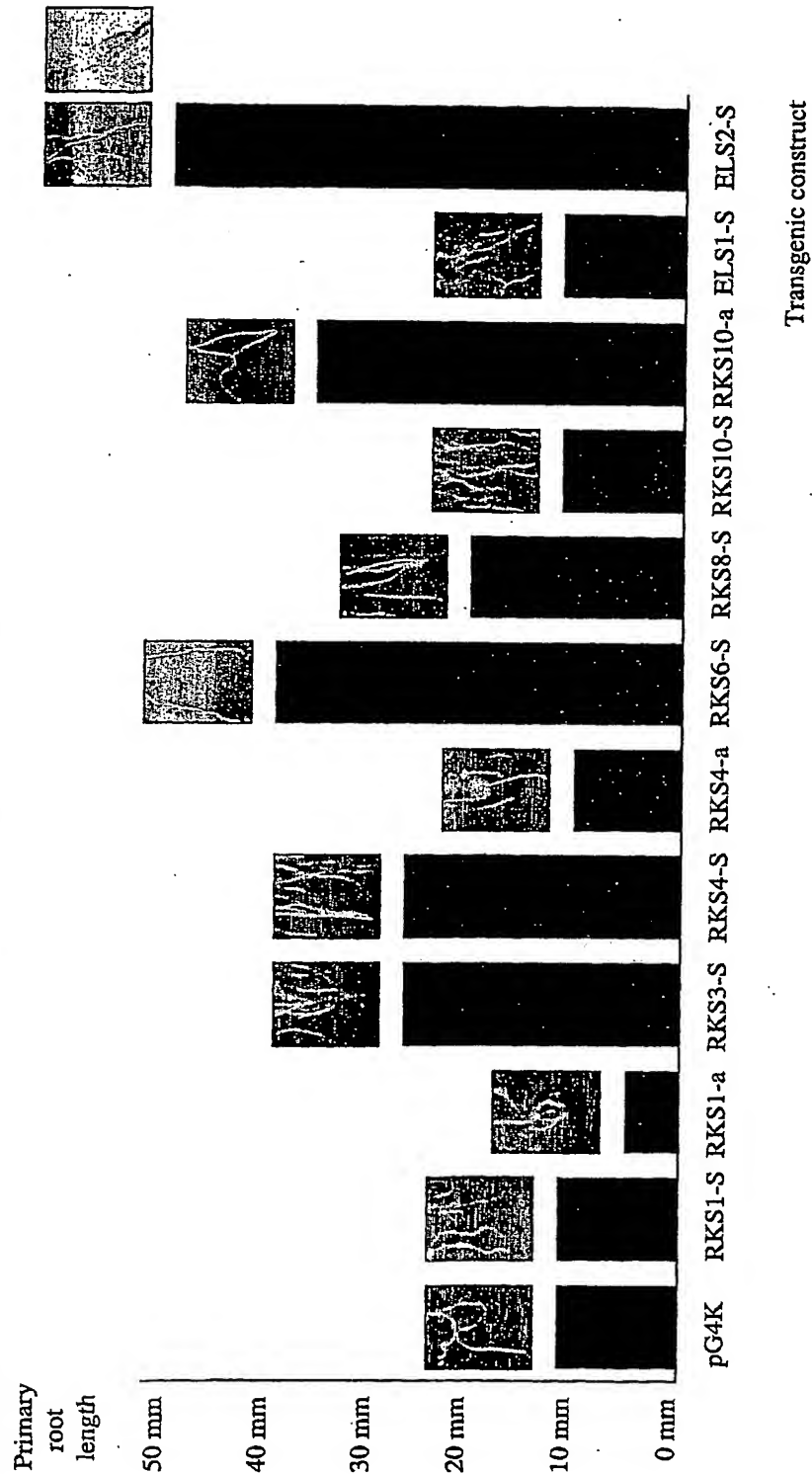




Fig. 25

Effects of RKS10 transgenic  
constructs on plant development  
of 45 days old *Arabidopsis* WS

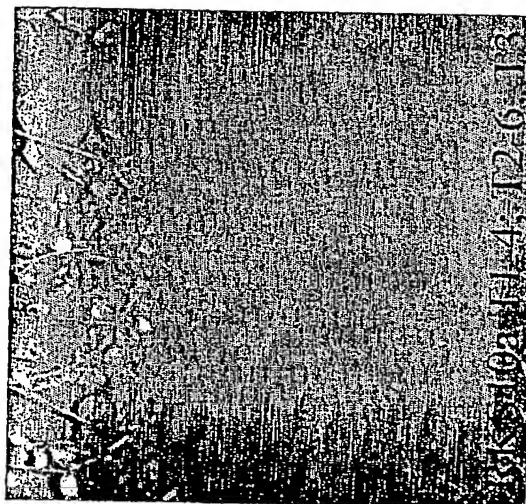
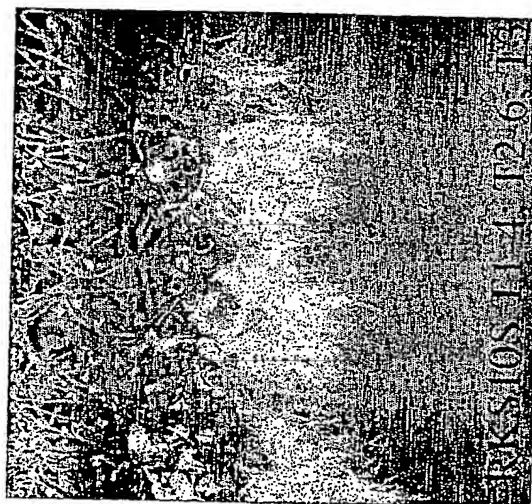
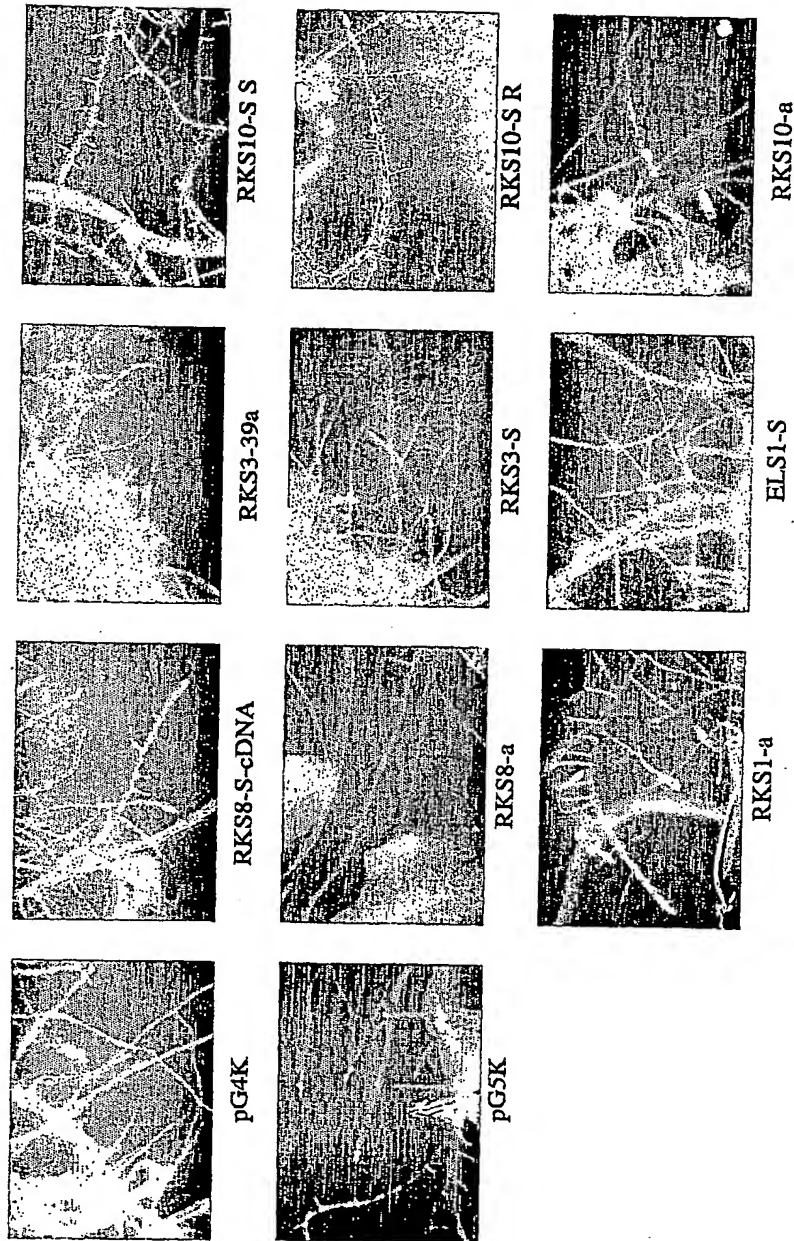


Fig. 26

Roots of Transgenic  
*Arabidopsis thaliana*



10/521518

FIG

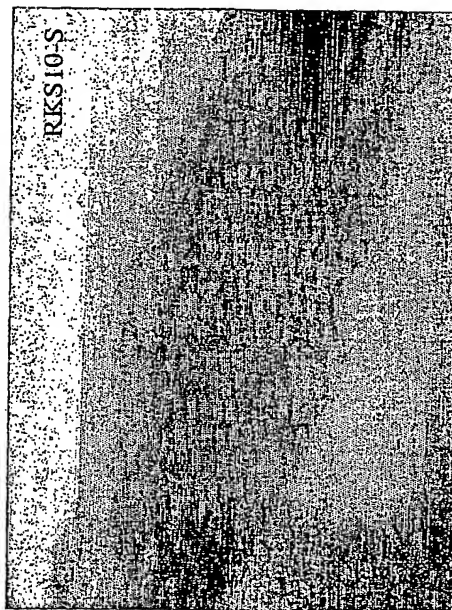
WO 2004/007712

PCT/NL2003/000524

27/36

Fig. 27

Root cells of transgenic  
*Arabidopsis thaliana*



10/521518

WO 2004/007712

28/36

PCT/NL2003/000524

Fig. 28

Influences of T1 transgenic  
*Arabidopsis* WS plants

ELS-1-T1



RKS8-a-T1-10



RKS10-a-T2



RKS10-S-T1-10



Control pGreen4K



10/521518

WO 2004/007712

29/36

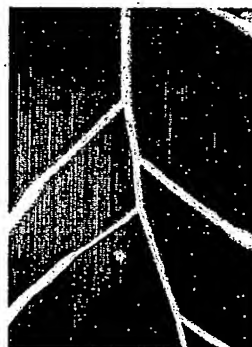
PCT/NL2003/000524

Fig. 29

Influences of T1 transgenic  
*Arabidopsis* WS plants



Control pG4K



RKS8-a-T1-10



RKS10-S-T1-10



WO 2004/007712

30/36

PCT/NL2003/000524

Fig. 30

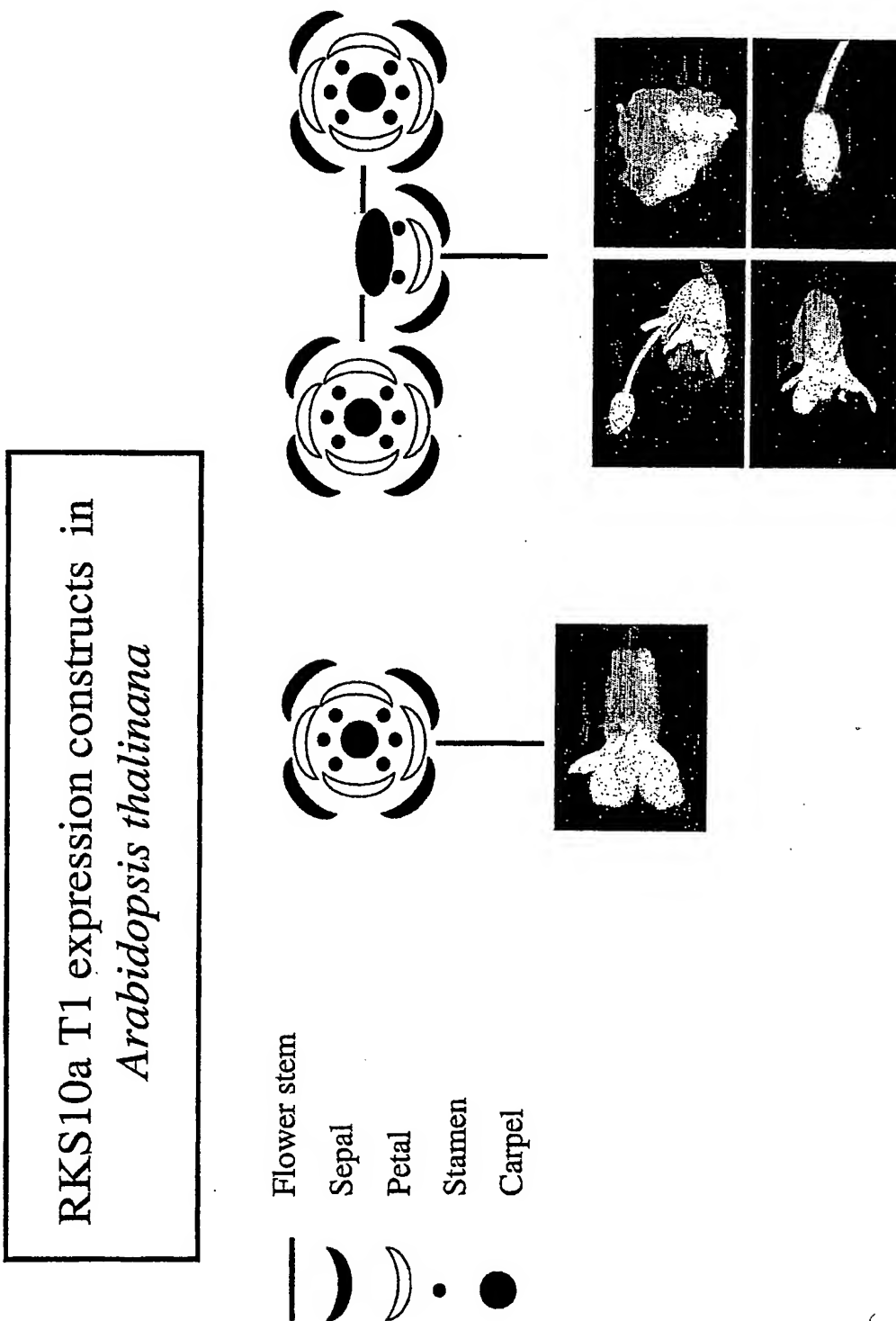
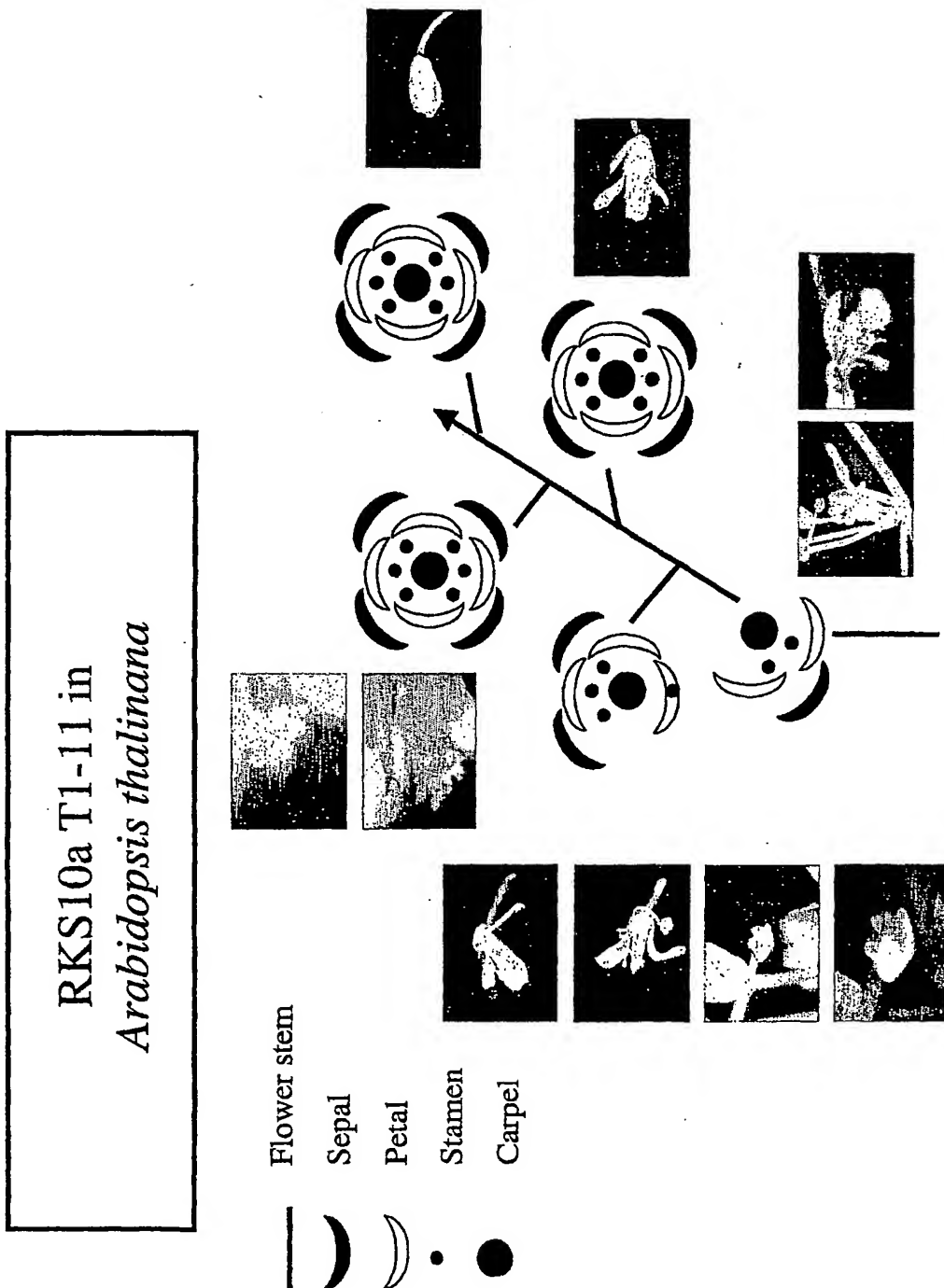


Fig. 31



10/521513

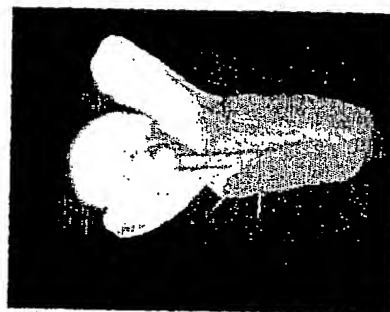
WO 2004/007712

32/36

PCT/NL2003/000524

Fig. 32

RKS10 antisense effects in  
*Arabidopsis thaliana*



pGreen 4K



RKS10a T1-11

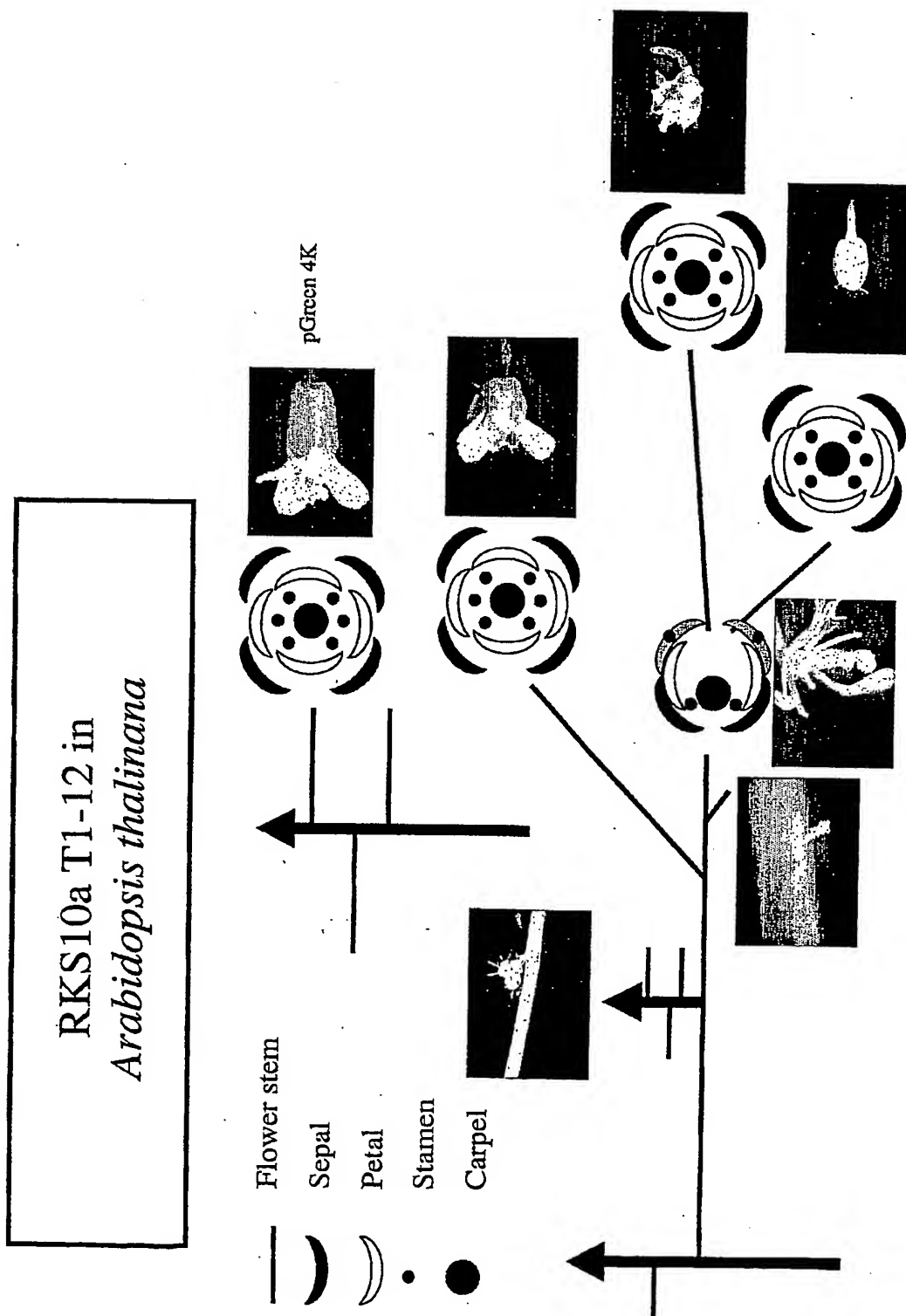


detail flower RKS10a T1-11





Fig. 33

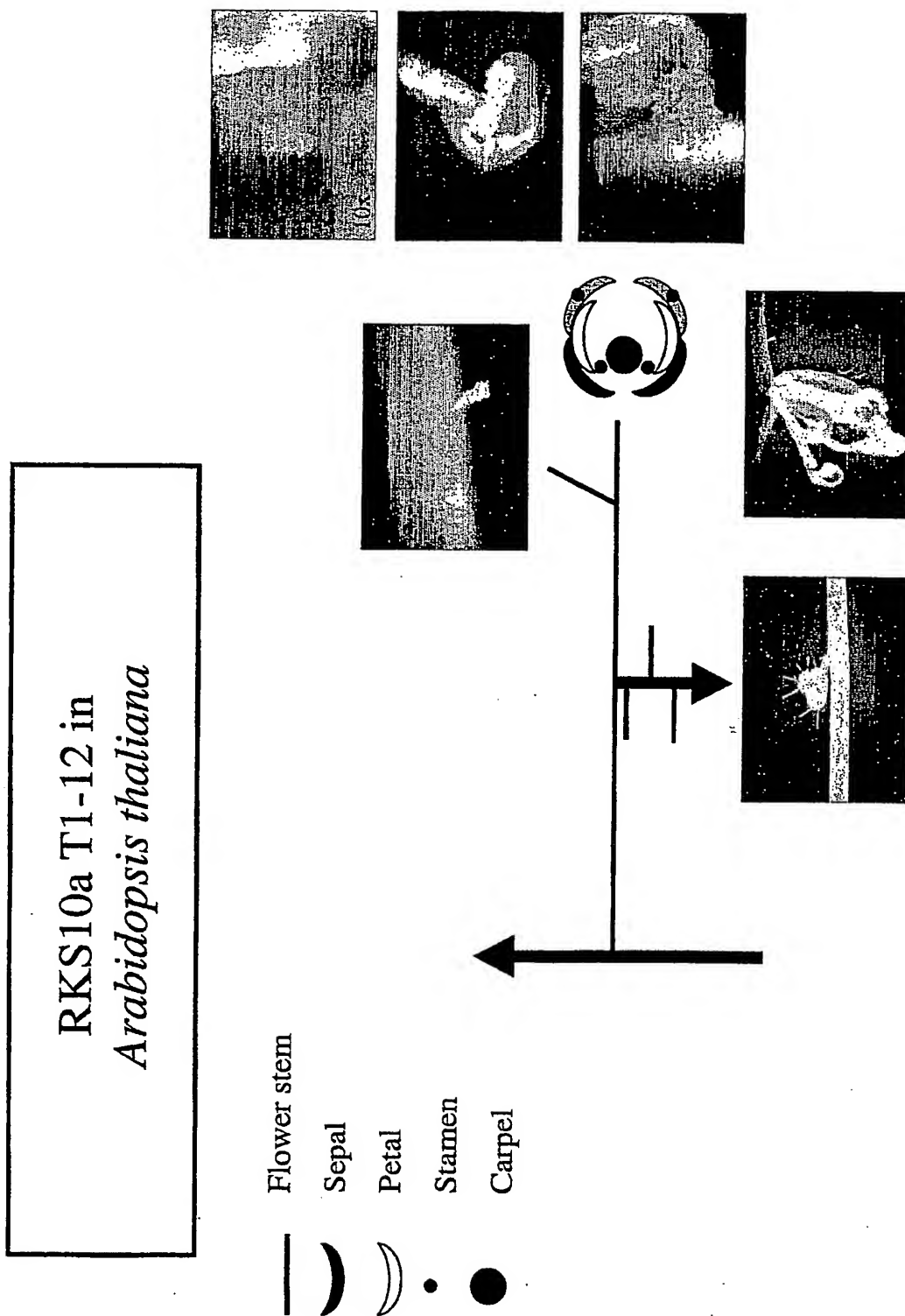


WO 2004/007712

PCT/NL2003/000524

34/36

Fig. 34



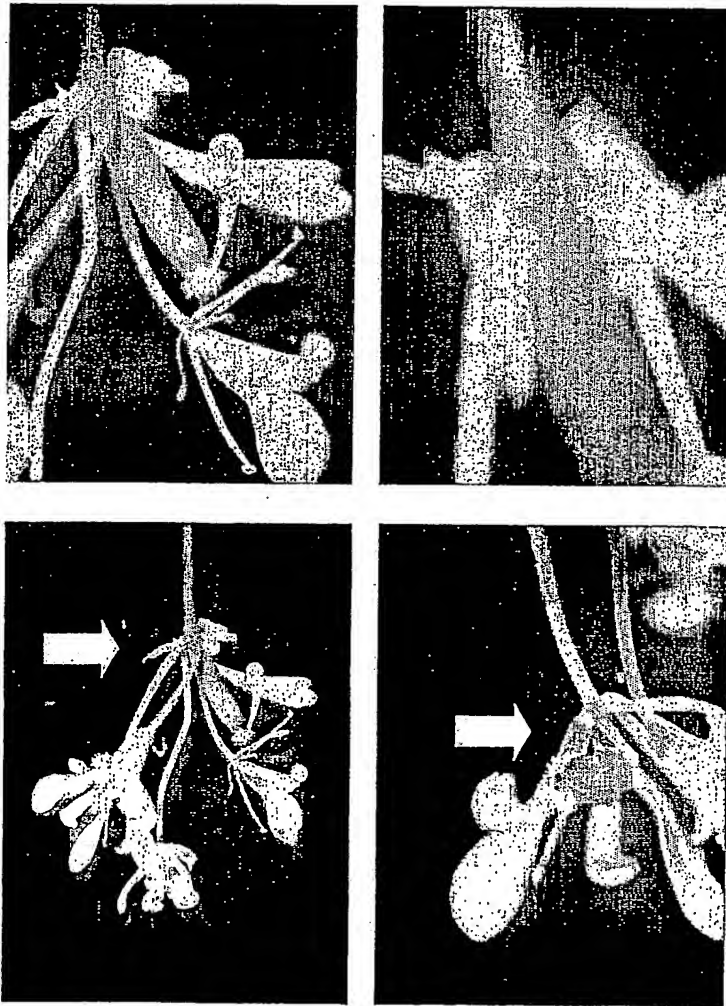
WO 2004/007712

35/36

PCT/NL2003/000524

Fig. 35

RKS13 regulates  
flower meristem identity in  
*Arabidopsis thaliana*



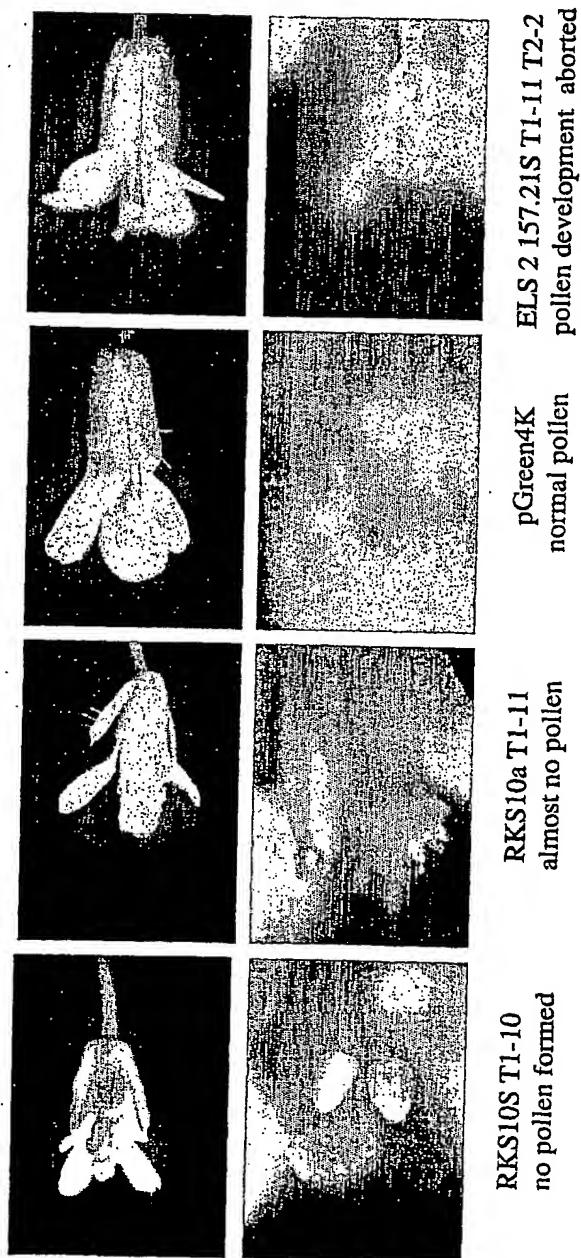
WO 2004/007712

36/36

PCT/NL2003/000524

Fig. 36

Male sterile transgenes in  
*Arabidopsis thaliana*



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**